

ABSTRACT

A method of degrading a plastic in the presence of a biosurfactant; a method of degrading a plastic by contacting the plastic with a microorganism; a process for producing a useful substance from a plastic which comprises degrading the plastic by contacting the plastic with a

5 microorganism and further converting the components of the thus degraded plastic with the use of a microorganism; a method of degrading a plastic by contacting the plastic with a microorganism in the coexistence of a biosurfactant and/or a plastic-degrading enzyme and thus degrading the plastic under the action of the microorganism; a transformant microorganism having been recombined with at least one DNA selected from among a DNA containing a gene
10 encoding a surface active substance, a DNA containing a gene encoding a plastic-degrading enzyme and a DNA containing a gene encoding a useful substance; novel genes as described above; and proteins encoded thereby.